OECD Workshop on Extended Producer Responsibility: Who is the Producer? Ottawa, Canada December 2-4, 1997

SUMMARY OF WORKSHOP - PREPARED BY THE US EPA

The following is a summary prepared by the U.S. EPA of the presentations made during the first in the series of four OECD workshops on extended producer responsibility (EPR). This workshop, entitled "Who is the Producer?" is part of the third (stakeholder input) phase of OECD's research program on EPR. The final outcome of the OECD research program will be a guidance document for governments considering establishing EPR policy.

This report is intended to highlight the proceedings rather than act as meeting minutes or a formal proceedings document. Papers submitted by the panelists detail the presentations.

Session I - Opening

A general welcome was given by *Vic Shantora,* the Director General of the Toxics Pollution Prevention Directorate at Environment Canada. Then *Jean Cinq-Mars,* of the OECD, made opening remarks, giving a brief overview of the history and the mission of the OECD and outlining the purpose of and process for the Phase 3 workshop series. He made the point that there is a critical need to decouple the correlation between waste generation and GDP growth and that EPR has the potential to alter that link.

In terms of process, he explained that after two days of panel presentations and participant discussions around the four objectives, a drafting group would be convened to construct a detailed outline capturing the outcomes of the discussions. The drafting group would be made up of representatives from all the stakeholder groups present. The draft outline would be presented to the workshop participants the morning of the third day, at which time all would be given the opportunity to comment. The OECD Secretariat would then draft the chapter based on the detailed outline and the comments received. All participants would be given an opportunity to review and comment on the draft chapter before it is finalized and approved by the Pollution Prevention Control Group and distributed at the second workshop in Helsinki. This basic process would be repeated at each of the three remaining workshops, with the final product being the completed guidance manual.

Richard Emory, a consultant to the OECD, gave the keynote address. He outlined the core principles of EPR as when producers:

design cleaner products
reuse materials/products
incorporate secondary materials
minimize waste management costs

reduce consumption of natural resources

He summarized the benefits to producers as improvements in technology and production efficiencies, as well as competitiveness. In addressing the question of "Who is the Producer?", Mr. Emory defined this entity as the social actor most efficiently able to internalize in its product pricing the cost of managing its products when they become post-consumer waste. It is also the actor who can change product design, implement the use of secondary materials, organize a sector to manage the portion of the diminished waste stream to promote recycling, and pass on the unavoidable costs to product purchasers. He addressed the question "For what is the producer responsible?" The producer should be ultimately responsible for the financial and physical management of post-consumption waste for its share of products from its business sector. Mr. Emory explained that this should be based on life-cycle analysis to minimize costs and environmental impacts. He proposed that responsibility could be shared in many ways, including:

establishment of a PRO for its business sector
government collaboration to control "free riders" and unfair competition, and ensure an equitable distribution of costs and benefits
public awareness and participation in programs
government provision of incentives for public participation (i.e., reducing barriers, eliminating subsidies of raw materials, procurement programs, outreach and education, and local pay-as-you- throw systems)

He suggested that producers active in EPR be rewarded publicly and consumers too should be rewarded by not having to pay for waste more than once.

Session 2 - Extended Producer Responsibility Policy Objectives

Four panelists made presentations addressing the concept of EPR, its policy objectives, and how different objectives influence the approaches taken:

Henk Wijen, Ministry of Environment, Netherlands
Cynthia Lewis, Shared Product Responsibility Group, Beveridge and Diamond, P.C.
John Jackson, Citizen's Network on Waste Management, Canada
Ulf Jaeckel, Ministry of Environment, Germany

Reid Lifset, of Yale University, acted as moderator for this session and made some opening remarks. He pointed out that EPR can address both upstream and downstream effects of products-it can increase the recovery of waste and precipitate design changes that further reduce life-cycle environmental impacts.
He explained that EPR can tap expertise, alter behavior, generate funds (i.e., transfer costs from the public to the private sector), and accomplish environmental goals. He outlined the conceptual foundations of EPR as changing the form of product delivery, such as in the case of leasing; and altering property rights. Designating the "producer" should be based on which actor has the

greatest leverage over product design and waste recovery opportunities, as well as who is in the best position to maximize value (both environmental and business values). He said EPR could be implemented in many ways, which could be represented by a voluntary to mandatory continuum. Also, it could be offered as an means of obtaining regulatory flexibility.

Henk Wijen explained that EPR programs in the Netherlands have focussed on minimizing waste and maximizing recycling. These schemes are not uniform-some are voluntary and others are mandatory. The policy framework for EPR programs in the Netherlands has evolved from troubleshooting specific waste problems to pursuing continuous improvements and striving for sustainable business development. He feels the role of governments in EPR programs should be to stimulate, facilitate, monitor, and coordinate activity. There should be a move toward less government control, and there should be a shift in focus from consumers to focussing producers. He mentioned that 43 pilot studies of different industry sectors are underway in the Netherlands, the goal of these studies being to develop a guidance manual in 1998 on how to implement EPR programs more broadly. The industries being studied include chemicals, construction, computers, tiles, paints, and PVC window frames.

Cynthia Lewis addressed the issue of how to achieve EPR objectives. She discussed possible criteria for measuring the effectiveness or guiding the development of an EPR program:

environmental effectiveness
economic efficiency, including the effects on the cost of production, energy use and production efficiencies, product durability, and safety
innovative advancement
political acceptability
administrability

Players should be made responsible when they are in the best position to achieve the objectives of EPR. This means that players beyond the product producer should take a role. Shared responsibility is the most effective approach.

John Jackson talked about citizens' objectives for EPR policies-minimizing materials and energy consumption; maximizing reuse; and eliminating toxics use, emissions of hazardous materials, and waste disposal. He expressed the view that the producer be the primarily responsible party for EPR, while acknowledging that the consumer also has a responsibility when making purchasing decisions and complying with take-back programs. EPR programs should focus mostly on maximizing reuse and reduction, more than recycling. Governments should have strict guidelines for producers on achieving reuse and reduction targets and moving towards phasing out disposal and toxic emissions during reprocessing. He feels that waste-to-energy should not be allowed as an alternative means of compliance with EPR policies.

Ulf Jaeckel spoke about the German Waste Avoidance and Waste Management Act of 1986 and the creation of the Duales System Deutschland. To meet its goal of closing material cycles and avoiding waste, it uses political and legal instruments to encourage voluntary agreements

between the state and industry. It also mandates environmental labeling and take-back of packaging (1991 Packaging Ordinance). The costs of the program are distributed among the manufacturers, importers, and retailers. Fees paid vary depending on the type of material and the weight. The fee structure has resulted in packaging made with less and lighter materials and an increase in the use of materials like cardboard, which has a lower fee as compared to glass. He briefly outlined guidelines for developing EPR policy:

> the best method of implementing EPR will vary depending on the market structure for specific products
> EPR policy should address the whole life cycle of products and not focus only on waste
> EPR should be based on higher level goals, such as saving resources and reducing emissions to the environment

Session 3 - Roles and Responsibilities

Panelists made presentations addressing the roles and responsibilities, shared or extended, of all those involved in the product life cycle:

> Erja Fagerlund, Ministry of Trade and Industry, Finland
> Georges Michaud, Nortel, Canada
> Chip Brewer, S.C. Johnson Wax, USA
> Stefan Wohrl, BIAC, Association of the Automobile Industry, Germany

Erja Fagerlund described a study completed by the National Consumer Research Center in Finland that focused on consumers and producers and attempted to ascertain the conditions for environmental improvement in different industry sectors, including detergent, clothing, textiles, electronic and electrical appliances, and paper products. She presented the results of the study interviews. Although no general conclusions were evident, several concepts surfaced:

> Consumers felt that producers had the best technical knowledge of their products and should therefore have primary responsibility for the environmental effects of their products
> Consumers were willing to participate in environmental programs
> Consumers and producers agreed that retailers had an important role in the success of environmental programs
> Retailers worried about the profitability of interpreting consumer demand to producers
> Consumers were not willing to pay more for products to meet environmental goals

Georges Michaud talked about the life cycle management program at Nortel. He explained that the program involves carefully constructed contracts with suppliers, a Design for Environment Program, and take-back programs. He pointed out the importance of having the full cooperation of consumers for a program to be successful. He noted that there are special concerns when using old components in new products. He closed by acknowledging that Nortel, as the producer,

has taken primary responsibility, but there is involvement with other players. A collaborative approach is necessary.

Chip Brewer described the President's Council on Sustainable Development (PCSD) approach to EPR. He noted the change in terminology by the PCSD from "producer" to "product" in EPR to point out that responsibility should not be limited to the producer, but rather be shared among all the actors in the product chain. He listed the specific tools and incentives that could be used to implement EPR depending on the type of product:

Product stewardship programs and public/private partnerships
Take-back, buy-back, leasing
Education, information, and training
Government subsidies/tax credits
Taxes and fees

He also summarized the benefits of EPR:

More efficient use of resources
Cleaner products and technology
Responsible consumer choice
More efficient and competitive manufacturing
Safer storage, shipping, and handling of materials
Improved relationships between communities and manufacturing companies
Improved recycling and recovery

Stefan Wohrl described activities undertaken by the auto industry in Germany to reduce car emissions and fuel consumption, preserve resources through pursuing closed materials cycles, and facilitate recycling of fluids and parts. He also mentioned the recycling goals under the voluntary end-of-life vehicle ordinance. He pointed out that all economic sectors involved in the lifetime of a vehicle have a responsibility for the environmental impacts of a vehicle.

Session 4 - Working Groups

Four working groups convened in breakout rooms to further discuss roles and responsibilities. The groups completed a matrix listing the different actors potentially involved in EPR programs and the allocation of various responsibilities among them.

Session 5 - Who Is The Producer

The objective of the panel discussions in this session was to further **refine** who the producer is and for what are they responsible. The following panelists made presentations:

Thomas Lindhqvist, Lund University, Sweden
Bette Fishbein, Inform, USA
Bengt Jobin, BIAC, Federation of Swedish Industries, Sweden
Benny Hasenson, BIAC, Confederation of Finish Industry and Employers, Finland

Thomas Lindhqvist explained that, in Sweden, EPR has focussed on end-of-life and that there is now an effort to expand the scope and provide incentives for changing products. To bring about these kinds of changes, especially with complex products like cars, electronics, and appliances, shared responsibility is vital. He noted, however, that one actor needs to be ultimately responsible, and responsibilities for all actors need to be clearly defined. He spoke about the deposit-refund system for cars in Sweden created years ago and the problems inherent with this type of program. Although you need to collect money to pay for recycling up front to assure the money is there at the end of the car's life, it is difficult to determine the proper charge. If, when a car is returned, there is a cost savings, the system should distribute that savings so there is an incentive to make the system more efficient. If there isn't enough funding when the car is returned, there needs to be a mechanism to take care of the shortfall.

Bette Fishbein emphasized that the ultimate goal of EPR programs should be to move toward sustainability by addressing the entire life-cycle of products. This would involve moving from a linear to a circular materials flow model and providing economic incentives to increase recycling, reuse, and waste reduction. She expressed concern that assigning responsibility too broadly (i.e., to all actors in the product chain) will lead to a situation where actors will avoid their responsibility. For an EPR policy of shared responsibility to be effective, specific responsibility must be clearly assigned and industry should have a major role in allocating those responsibilities. The consumer always shares responsibility and ultimately pays. The producer is in the best position to implement design changes and should be linked to their products' end-of-life so they can effectively reduce downstream effects. Ideally manufacturers should take their products back, but this is not always practical. EPR systems will differ depending on the country and the product sector, but should be structured to give competitive advantage to less wasteful products. Physical and financial responsibility for handling the post-consumer stage of products should be assigned. There should be numerical targets for the percent of material recycled and guidelines on what constitutes recycling.

Building, electronic and electrical equipment, furniture, and textiles will be the focus of future EPR efforts in Sweden, explained *Bengt Jobin.* He summarized some lessons learned from Sweden's past efforts:

government should assign responsibility and set goals, but let industry decide how to accomplish goals

responsibility should be shared along the whole product chain or industry will not participate voluntarily
stakeholders must monitor activities
costs should be distributed equitably
information to consumers is important
incentives are needed for all parties to participate
better control over waste handling costs is vital

He made the point that a system that simply assigns financial and not physical responsibility becomes a tax system and will not encourage EPR. He also made the point that governments should not focus solely on EPR. The overarching goal should be changing products to achieve maximum resource efficiency in an environmentally, technically, and economically acceptable manner. EPR is only one method of accomplishing this.

Benny Hasenson stated that the producer has the strongest influence over product characteristics and believes that industry generally accepts the notion that they should extend responsibility and redesign products. He explained that the EU position, as stated in the December 1996 Council Resolution-A Community Strategy for Waste Management, calls for all actors in the chain to take responsibility. The resolution acknowledges that the producer has a strategic role and responsibility for the design, content, and construction of products. He believes a cost effective EPR system would:

work with downstream industries to fulfill EPR tasks
not force one actor to bear total responsibility and costs
allow all actors in the chain to negotiate how responsibility should be allocated without constraints imposed by the government

A sustainable EPR system must be economically efficient, encourage innovative advancement, and be easy to administer.

Session 6 - Producer Responsibility Organizations

Panel discussions explored the role and function of producer responsibility organizations (PROs). Panelists were:

Fritz Flanderka, Duales System Deutschland, Germany
Robert Fenton, University of Winnipeg, Manitoba, Canada
Frauke Druckrey, CEFIC, Belgium
Michael Bennett, Refrigerant Reclaim, Australia

Fritz Flanderka spoke about Germany's experience with the green dot system. He went over the details of the 1991 Packaging Ordinance and its implementation schedule. He described the operation of the DSD, a non-profit corporation funded by license fees from participating manufacturers to collect and handle packaging material. He discussed the difficulties the DSD

faced in trying to set up the system in 18 months and accommodate the high quotas set out by the ordinance right at the start of the program. Free riders are another big problem for the system.

Robert Fenton explained that PROs can be a cost effective way for manufacturers to implement EPR. The role of the PRO could usefully be expanded to:

conduct research on lowering the environmental impacts of products
encourage waste prevention (i.e., reducing toxicity and volume)
internalize waste management and environmental costs of products
fulfill take-back obligations
develop life-cycle methodologies to analyze impacts
monitor and assess producers' activities for EPR partners

He proposed that the structure of the PRO should include consumers, have controls to discourage anticompetitive behavior, and represent all stakeholders so the needs of all groups are met. He brought up the concept of a mega-PRO, which would centralize activities, but have subgroups for various products or regions. Such a system could take advantages of the economies of scale in conducting life- cycle analyses, providing consumer education, etc.

Frauke Druckrey described the chemical industry Responsible Care Program, which was designed to improve environmental, health, and safety impacts of products. The program began in 1985 in Canada and is now used in 39 other nations, covering 80 percent of the industry. She explained how the program is, in a broad sense, similar to EPR and has shown how industry associations can influence the socioeconomic framework to reach the goals of EPR.

Michael Bennett gave an overview of the Refrigerant Reclaim organization. It is a nonprofit, industry- funded organization responsible for ozone-depleting refrigerants. The objectives of the program are to minimize emissions, reclaim material, destroy unwanted material, use environmentally sound processes, operate cost-efficiently, and advise others on proper handling of refrigerants. The program has been successful due in large part to the fact that there is:

a small number of participants in the market
a long-established trade association
a cooperative relationship with the government
existing take-back legislation
revenue from the sale of reclaimed product

Difficulties with the system are:

the material is colorless and odorless and therefore difficult to police (incentives to comply are critical)
the government doesn't have the resources to enforce at the state level
free riders (importers don't pay the levy and therefore have an advantage)
market failures point to the need for government regulation

Session 7 - Workshop Summary

In this session, participants reviewed and commented on the detailed outline that was compiled by the drafting group the previous evening. This outline summarized the outcomes of the discussions from the preceding sessions and will be used as a basis for the background section (Chapter 1) of the guidance document.

Session 8 - Next Steps

The moderator reviewed the next steps in the OECD Phase 3 process. OECD would draft Chapter I of the guidance document based on the detailed outline drafted and the comments from participants on that outline. The OECD will circulate the draft chapter to workshop participants some time in March, at which time participants will have the opportunity to comment. The revised draft chapter will be forwarded to the Pollution Prevention Control Group for final approval and will be distributed at the next workshop.

The next workshop in Helsinki, May 11 - 13, 1998, will identify and examine the effects on trade and competition and identify options for addressing issues like cartels and free riders. The objectives of the third workshop, in Washington, D.C. in late November 1998, are to explore the effect of various EPR instruments on different economic activities, identify the range of voluntary approaches to EPR, and discuss the costs and benefits of implementing EPR programs. The last workshop in Paris in the spring of 1999, will bring together the outcomes of the preceding three workshops by reiterating principles and clarifying policy options. This last workshop will be conducted jointly with OECD's waste minimization group.